

## PATENT ABSTRACTS OF JAPAN

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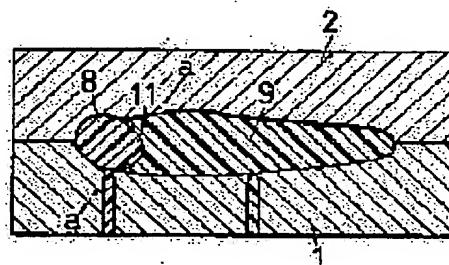
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(54) MONOLITHIC MOLDING OF HARD AND SOFT DIFFERENT MATERIALS AND MOLDED PRODUCT

(57)Abstract:

PROBLEM TO BE SOLVED: To increase the bonding strength of boundary surfaces by injecting a hard resin material and a soft resin material same thereto in quality into the different parts of the same cavity of a mold in a liquid state and separating the hard and soft resin materials after curing from the boundary surface being curved surface thereof to monolithically mold them.

SOLUTION: A molten hard resin 8 is injected into a mold element 1, for example, from the gate on the side of the head part thereof and a molten soft resin 9 is injected into the mold element 1 from the gate on the side of the tail part thereof. The hard and soft resins 8, 9 are different in hardness but same in quality. The cooled and cured hard and soft resins 8, 9 are separated from the boundary surface 11 being curved surface of them and a part of the curved surface 11 separating the hard and soft resins 8, 9 is formed to the line closed on the cross section shown by an a-a line. That is, the projected surface formed, for example, in consideration of the vertical direction of a cavity of the hard resin 8 and the recessed surface of the soft resin 9 are bonded and the hard and soft resins 8, 9 same to each other or same in quality are integrally bonded in the vicinity of the boundary surface 11.



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